

WHAT IS CLAIMED IS:

1 1. A method comprising:

2 sending a data packet configured based on a maximum packet
3 size along a path from a first network point to a second
4 network point;

5 along the path, generating fragment packets from the data
6 packet;

7 analyzing the size of at least one of the fragment packets
8 relative to a predetermined maximum packet size; and

9 depending on a result of the analysis, re-setting a maximum
10 packet size based on the size of one of the fragment packets.

1 2. The method of claim 1 also including re-setting the
2 maximum packet size equal to the size of one of the fragment
3 packets.

1 3. The method of claim 1 also including communicating the
2 new maximum packet size to the first network point.

1 4. The method of claim 1 also including communicating the
2 new maximum packet size from the second network point.

1 5. The method of claim 3 also including refraining from
2 communicating the new maximum packet size unless the maximum
3 packet size of the path has changed.

1 6. The method of claim 1 also including storing the maximum
2 packet size.

1 7. The method of claim 1 also including refraining from
2 changing the maximum packet size if the fragment analyzed
3 comprises the final fragment of the data packet.

1 8. The method of claim 1 in which the data packet that is
2 sent along the path is of the largest size allowed by the
3 network technology at the first point.

1 9. The method of claim 8 also including periodically
2 repeating the sending, generating, analyzing, and resetting.

1 10. A method comprising determining, at a receiving
2 point, a maximum data packet size of a network path from a
3 sending point to the receiving point.

1 11. The method of claim 10 also including communicating
2 the maximum data packet size to the sending point.

1 12. The method of claim 11 also including sending a
2 message of the size of the maximum data packet size from the
3 sending point to the receiving point.

1 13. The method of claim 10, in which the determining of
2 the maximum packet size includes:

3 storing a predetermined maximum packet size;
4 sending a data packet from the sending point to the
5 receiving point; and

6 comparing the size of the data packet to the predetermined
7 maximum packet size.

1 14. The method of claim 13 also including, depending on
2 the result of the comparison, re-setting the maximum packet
3 size depending on the size of the data packet.

1 15. The method of claim 14 also including, depending on
2 the result of the comparison, re-setting the maximum packet
3 size equal to the size of the data packet.

1 16. The method of claim 10 also including reporting the
2 maximum packet size to a sending point.

1 17. A method comprising:
2 sending a data message that is configured based on a maximum
3 packet size along a network path from a sending point to a
4 receiving point;
5 determining the size of the data message at the receiving
6 point; and
7 based on the determination, adjusting a maximum packet size
8 between sending and receiving points.

1 18. The method of claim 17 also including:
2 fragmenting the data message if its size exceeds a
3 maximum packet size;
4 determining the size of the largest fragment; and
5 optimizing communication based on the determination.

1 19. The method of claim 18, also including periodically
2 sending a test data message.

1 20. The method of claim 19, in which the test message is
2 larger than the maximum packet size.

1 21. A method comprising determining the maximum packet
2 size of a network path by sending a single data packet along
3 the network path.

1 22. The method of claim 21, in which the single data
2 packet is larger than the maximum packet size.

1 23. The method of claim 21, also including fragmenting
2 the packet into fragments.

1 24. The method of claim 21, also including comparing the
2 size of a fragment to a predetermined maximum packet size.

1 25. The method of claim 21, also including sending the
2 maximum packet size to a sending point on the network path.

1 26. The method of claim 25, also including generating
2 packets at the sending point, the packets at least as small as
3 the maximum packet size.

1 27. A method comprising:
2 sending a data packet on a path from a first network point
3 to a second network point;
4 along the path, generating fragment packets from the data
5 packet; and
6 analyzing at least one of the fragment packets to determine
7 a path maximum packet size.

1 28. The method of claim 27 also including comparing the
2 size of the fragment to a predetermined maximum packet size.

1 29. The method of claim 28 also including resetting the
2 predetermined maximum packet size to equal the size of the
3 fragment.

1 30. The method of claim 27 also including, based on the
2 comparison, choosing an optimal packet size for packets
3 sending packets from the first to the second network points.

1 31. A method comprising:
2 determining a maximum packet size of a network path; and
3 communicating the maximum packet size from a first point on
4 the path to a second point on the path.

5 32.
1 A method comprising:
2 sending a data packet along a network path, the data packet
3 being larger than the maximum packet size of the network path;
4 separating the packet into fragments; and
5 analyzing the size of the fragments to determine the maximum
6 packet size of the path.

1 33. A method comprising:
2 sending a message along a network path, the path
3 including sections, each of the sections having a maximum
4 message size limiting the size of messages passing through it,
5 the message being larger than the smallest maximum message
6 size of the sections;
7 fragmenting the message into fragments, the fragments
8 being at least as small as the smallest maximum message size;
9 and
10 at a receiving point, measuring the size of the largest
11 fragment.

1 34. The method of claim 33 also including communicating
2 the size of the largest fragment to a sending point.

1 35. The method of claim 34 also including comparing the
2 size of the largest fragment to a pre-determined maximum
3 message size.

1 36. A computer program embodied in a computer readable
2 medium, the program capable of configuring a computer to:

3 send a data packet along a path from a first network point
4 to a second network point;

5 along the path, generate fragment packets from the data
6 packet;

7 analyze the size of at least one of the fragment packets
8 relative to a predetermined maximum packet size; and

9 depending on a result of the analysis, re-set a maximum
10 packet size based on the size of one of the fragment packets.

11 37.

1 The program of claim 36, also capable of configuring a
2 computer to communicate the new maximum packet size to the
3 first network point.

1 38. A computer program embodied in a carrier wave, the
2 program capable of configuring a computer to:

3 send a data packet along a path from a first network point
4 to a second network point;

5 along the path, generate fragment packets from the data
6 packet;

7 analyze the size of at least one of the fragment packets
8 relative to a predetermined maximum packet size; and
9 depending on a result of the analysis, re-set a maximum
10 packet size based on the size of one of the fragment packets.

1 39. The program of claim 38, also capable of configuring
2 a computer to communicate the new maximum packet size to the
3 first network point.

40. A medium bearing intelligence configured to enable a
machine to effect actions that comprise

1 sending a data packet along a path from a first network
2 point to a second network point;

3 along the path, generating fragment packets from the data
4 packet;

5 analyzing the size of at least one of the fragment packets
6 relative to a predetermined maximum packet size; and

7 depending on a result of the analysis, re-setting a maximum
8 packet size based on the size of one of the fragment packets.